

FIG. 1A

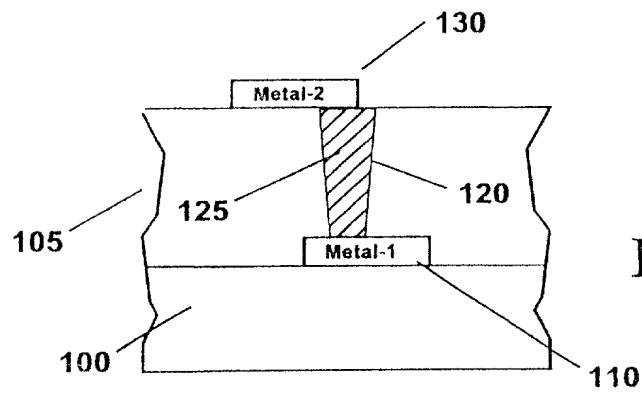


FIG. 1B

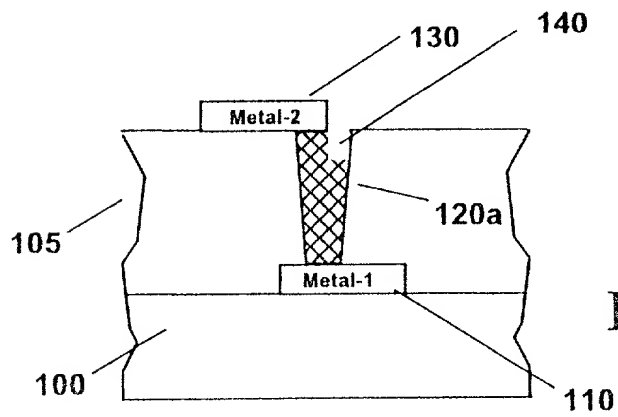
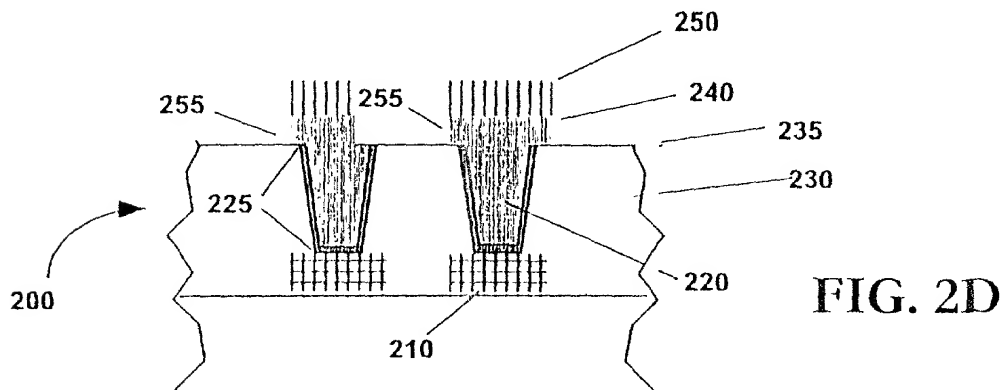
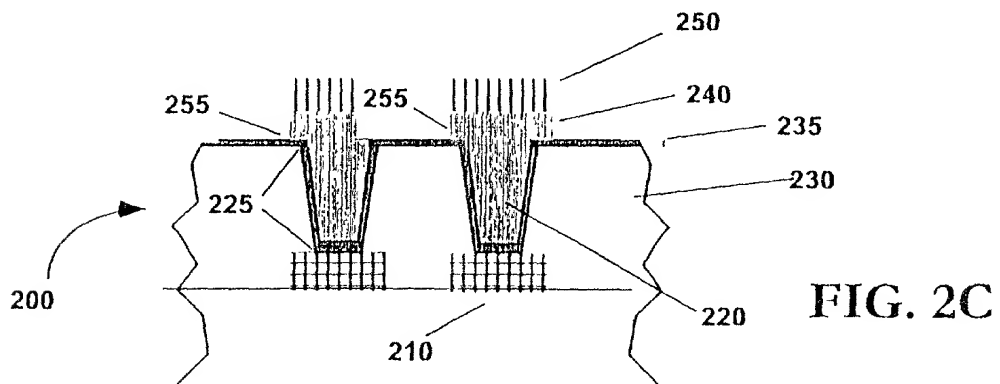
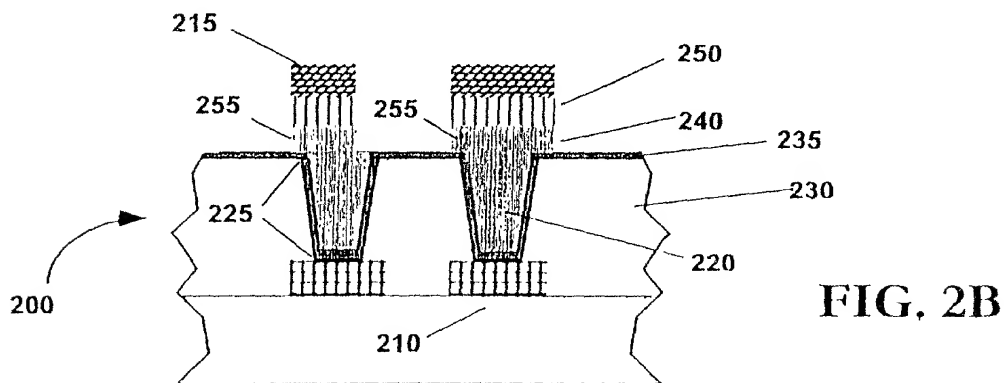
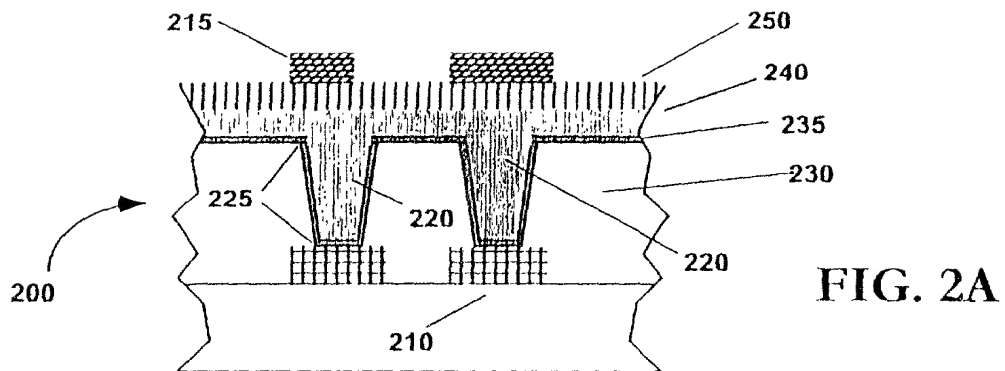


FIG. 1C



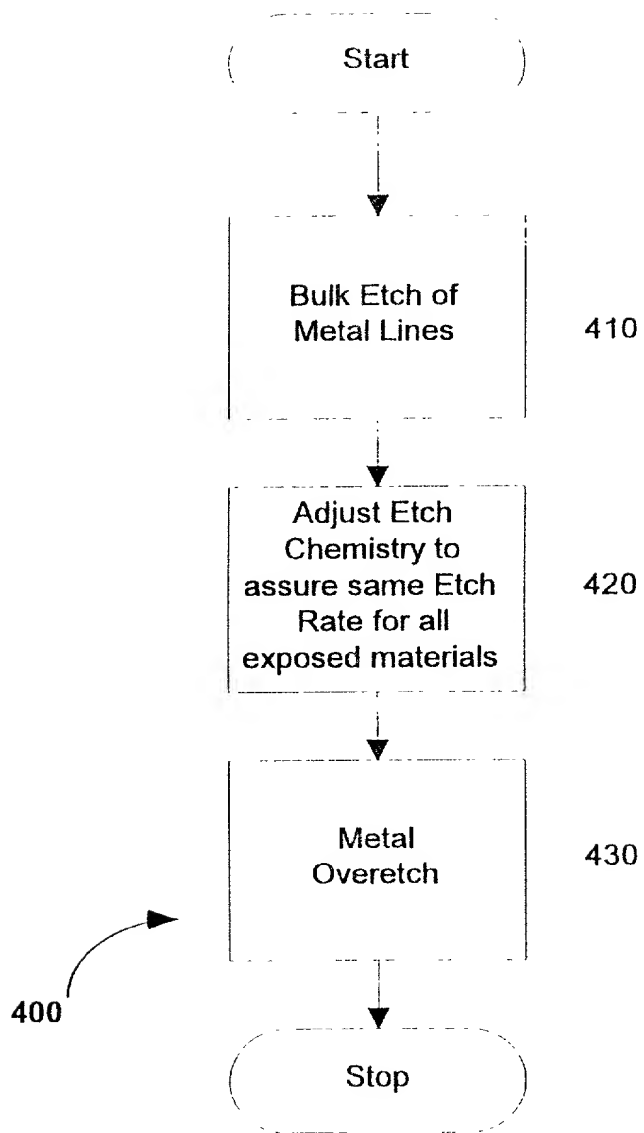


FIG. 3

Main etch chamber	TiN +			AlCu			Copper			Ti +		
	AlCu Bulk			Endpoint			Residue			1:1:1 Overetch		
	Step 01	Step 02	Step 03	Step 04	Step 05	Step 06	Step 07	Step 08	Step 09	Step 10	Step 11	Step 12
Pressure (mT)	0.00	10.00	10.00	10.00	10.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00
RF-Top (W)	0	0	360	360	360	360	0	0	0	0	0	0
RF-Bottom (W)	0	0	100	225	225	100	0	0	0	0	0	0
Gap (cm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BCI3 (sccm)	40.0	40.0	40.0	40.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0
Cl2 (sccm)	40.0	40.0	40.0	40.0	30.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
SF6 (sccm)	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
He clamp (%)	0.0	10.0	10.0	10.0	10.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0
Completion	Stabl	Stabl	Time	EndPt	Time	Time	Time	Time	Time	Time	Time	End
Time	30s	30s	24s	50s	5s	50s	10s	10s	10s	10s	10s	s
Channel				262 nm								
Delay (sec)				14								
Norm (sec)				2								
Norm value				0								
Trigger (%)				90								
Electrode Temp	50.0°C											
Chamber Temp	60.0°C											

FIG. 4